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EXAMINER

CHEN, QING

ART UNIT

PAPER NUMBER

2191

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/712,828	Applicant(s) BIGUS, JOSEPH P.	
	Examiner Qing Chen	Art Unit 2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-9,11-13 and 32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9,11-13 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is in response to the amendment filed on December 15, 2008.
2. **Claims 1, 2, 4-9, 11-13, and 32** are pending.
3. **Claims 1 and 32** have been amended.
4. **Claims 3, 10, and 14-31** have been canceled.

Response to Amendment

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claim 32** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 32 recites the limitation “said runtime environment.” There is insufficient antecedent basis for this limitation in the claim. In the interest of compact prosecution, the Examiner subsequently interprets this limitation as reading “a runtime environment” for the purpose of further examination.

Art Unit: 2191

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1, 2, 4-9, 11-13, and 32** are rejected under 35 U.S.C. 103(a) as being unpatentable over **US 6,868,413 (hereinafter “Grindrod”)** in view of **US 6,590,589 (hereinafter “Sluiman”)**.

As per **Claim 1**, Grindrod discloses:

- designating a customizable element of a set as a customizable template (*see Column 8: 27-37, “Preferably for each condition, two expressions 242, 244 and a comparison operator 246 for comparing values of the two expressions as well as a logical operator 248 for allowing grouping of conditions may be specified. The two expressions 240, 242 may be created by the administrator using an expression builder ...”*);
- compiling said customizable element into at least one object to form a ruleset (*see Column 14: 25-27, “... XML is generated from data regarding the new or modified business rule as entered or modified via the user interfaces.”; Column 20: 50-53, “Examples of computer or program code include machine code, as produced, for example, by a compiler, or files containing higher level code that may be executed using an interpreter.”*);

Art Unit: 2191

- parsing said set to detect said customizable element designated as a customizable template (see Figure 4: 232 and 234; Column 8: 44-57, “The business logic application preferably processes each condition line by line beginning with the first condition specified in the user interface 230.” and “... the business logic application evaluates the first condition 232 to determine if the transaction data for state is equal to C. If the first condition 232 is met, then the business logic application proceeds to evaluate the second condition 234.”); and

- enabling editing of said rule-based application in a runtime environment (see Column 2: 5-9, “Thus, what is needed is a system and method that facilitate customizing an off-the-shelf business process automation software system to fulfill specific requirements of a specific business process for a specific organization while providing a user friendly interface.”; Column 7: 7-16, “The business rules management console user interface 200 is typically the starting point for an administrator of the customizable business logic application administrator. The business rules management console 200 facilitates management of the business rules application and allows the administrator or end user to create and/or modify business rules in order to customize business processes.” and 39-44, “In particular, FIGS. 3-6 are exemplary user interfaces 220, 230, 250, and 270 for entering or modifying and displaying general information, conditions, actions, and schedule, respectively, regarding a new business rule or an existing business rule selected via, for example, the business rules manager.”; Column 19: 41-56, “Although not expressly shown, the business rule process 700 also includes a runtime verification process. In particular, the runtime verification process checks that correct data types are being compared and assigned and checks for errors in conversion of data types, handling

Art Unit: 2191

module and module parameter related errors, and elements of expressions that may not be available in various situations.”).

However, Grindrod does not disclose:

- the customizable element being selected by an end-user.

Sluiman discloses:

- the customizable element being selected by an end-user (*see Column 4: 60-64, “In the example of FIG. 3, a “Name” attribute 72 is shown highlighted. Box 74 in FIG. 3 is displayed by macro list generator 16 to permit the user to define the name attribute as being customizable by future applications to be built on the template of the example.”).*

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Sluiman into the teaching of Grindrod to include the customizable element being selected by an end-user. The modification would be obvious because one of ordinary skill in the art would be motivated to allow different customization options to be defined for the same template, allowing different potential users to make differing versions of the template (*see Sluiman – Column 10: 53-56).*

As per **Claim 2**, the rejection of **Claim 1** is incorporated; and Grindrod further discloses:

- wherein said set comprises a ruleset (*see Figure 2; Column 7: 8-16, “The business rules management console 200 facilitates management of the business rules application and allows the administrator or end user to create and/or modify business rules in order to customize business processes.”).*

Art Unit: 2191

As per **Claim 4**, the rejection of **Claim 1** is incorporated; and Grindrod further discloses:

- customizing said customizable element (*see Column 11: 41-48, “The following are examples of expressions in which symbols are designated with braces characters {}. Examples of expressions include: Hello, the time is {TIME}. The Help Desk Ticket {TR, Problem No.} was created in response to your request on {DATE} at {TIME}. {DB, Clients, Client ID, “Sequence”=1221} ...”).*

As per **Claim 5**, the rejection of **Claim 1** is incorporated; and Grindrod further discloses:

- wherein said customizable element comprises a variable (*see Column 11: 49-55, “... symbols may represent various types of data such as ... system environmental variables ...”).*

As per **Claim 6**, the rejection of **Claim 1** is incorporated; and Grindrod further discloses:

- wherein said customizable element comprises a rule (*see Column 11: 49-55, “... symbols may represent various types of data such as ... business rules templates ...”).*

As per **Claim 7**, the rejection of **Claim 1** is incorporated; and Grindrod further discloses:

- wherein said customizable element comprises a ruleset (*see Column 11: 49-55, “... symbols may represent various types of data such as ... business rules templates ...”).*

As per **Claim 8**, the rejection of **Claim 1** is incorporated; and Grindrod further discloses:

- designating a ruleset of said set as a customizable ruleset template (*see Column 12: 41-44, “Preferably, business rules templates are provided. Business rules templates are*

Art Unit: 2191

predefined and reusable text items that can be defined, stored, and reused by various business rules.”).

As per **Claim 9**, the rejection of **Claim 8** is incorporated; and Grindrod further discloses:

- generating a customized ruleset from the customizable ruleset template (*see Column 12: 41-44, “Preferably, business rules templates are provided. Business rules templates are predefined and reusable text items that can be defined, stored, and reused by various business rules.” and 48-49, “Templates allow the same string of text to be re-used by multiple business rules.”).*

As per **Claim 11**, the rejection of **Claim 1** is incorporated; and Grindrod further discloses:

- enabling customization in a development environment (*see Column 7: 39-44, “In particular, FIGS. 3-6 are exemplary user interfaces 220, 230, 250, and 270 for entering or modifying and displaying general information, conditions, actions, and schedule, respectively, regarding a new business rule or an existing business rule selected via, for example, the business rules manager.”).*

As per **Claim 12**, the rejection of **Claim 1** is incorporated; and Grindrod further discloses:

Art Unit: 2191

- re-editing a previously generated rule (*see Column 7: 30-32, "From the business rules management console 200, the administrator may elect to create, modify, or delete a business logic rule."*).

As per **Claim 13**, the rejection of **Claim 1** is incorporated; and Grindrod further discloses:

- wherein a new ruleset is generated from a customizable ruleset template, and a pre-existing customizable rule template is associated with said new ruleset and is unchanged (*see Column 12: 41-44, "Preferably, business rules templates are provided. Business rules templates are predefined and reusable text items that can be defined, stored, and reused by various business rules."* and 48-49, "Templates allow the same string of text to be re-used by multiple business rules.").

As per **Claim 32**, Grindrod discloses:

- designating a customizable element of a set as a customizable template, where the customizable element is one of: a variable, a rule, or a ruleset (*see Column 8: 27-37, "Preferably for each condition, two expressions 242, 244 and a comparison operator 246 for comparing values of the two expressions as well as a logical operator 248 for allowing grouping of conditions may be specified. The two expressions 240, 242 may be created by the administrator using an expression builder ..."; Column 11: 49-55, "... symbols may represent various types of data such as ... system environmental variables ..."*);

Art Unit: 2191

- compiling said customizable element into at least one object to form a ruleset (*see Column 14: 25-27, "... XML is generated from data regarding the new or modified business rule as entered or modified via the user interfaces."; Column 20: 50-53, "Examples of computer or program code include machine code, as produced, for example, by a compiler, or files containing higher level code that may be executed using an interpreter.";*
- parsing said set to detect said customizable element designated as a customizable template (*see Figure 4: 232 and 234; Column 8: 44-57, "The business logic application preferably processes each condition line by line beginning with the first condition specified in the user interface 230." and "... the business logic application evaluates the first condition 232 to determine if the transaction data for state is equal to C. If the first condition 232 is met, then the business logic application proceeds to evaluate the second condition 234.";* and
- editing said customizable element in a runtime environment, where said editing comprises generating a new ruleset from a customizable ruleset template, and where a pre-existing customizable rule template is associated with said new ruleset and is unchanged (*see Column 2: 5-9, "Thus, what is needed is a system and method that facilitate customizing an off-the-shelf business process automation software system to fulfill specific requirements of a specific business process for a specific organization while providing a user friendly interface.";* Column 7: 7-16, *"The business rules management console user interface 200 is typically the starting point for an administrator of the customizable business logic application administrator. The business rules management console 200 facilitates management of the business rules application and allows the administrator or end user to create and/or modify business rules in order to customize business processes."* and 39-44, *"In particular, FIGS. 3-6 are exemplary*

Art Unit: 2191

user interfaces 220, 230, 250, and 270 for entering or modifying and displaying general information, conditions, actions, and schedule, respectively, regarding a new business rule or an existing business rule selected via, for example, the business rules manager.”; Column 11: 41-48, “The following are examples of expressions in which symbols are designated with braces characters {}. Examples of expressions include: Hello, the time is {TIME}. The Help Desk Ticket {TR, Problem No.} was created in response to your request on {DATE} at {TIME}. {DB, Clients, Client ID, “Sequence”=1221} ...”; Column 12: 41-44, “Preferably, business rules templates are provided. Business rules templates are predefined and reusable text items that can be defined, stored, and reused by various business rules.” and 48-49, “Templates allow the same string of text to be re-used by multiple business rules.”; Column 19: 41-56, “Although not expressly shown, the business rule process 700 also includes a runtime verification process. In particular, the runtime verification process checks that correct data types are being compared and assigned and checks for errors in conversion of data types, handling module and module parameter related errors, and elements of expressions that may not be available in various situations.”).

However, Grindrod does not disclose:

- the customizable element being selected by an end-user.

Sluiman discloses:

- the customizable element being selected by an end-user (see Column 4: 60-64, “In the example of FIG. 3, a “Name” attribute 72 is shown highlighted. Box 74 in FIG. 3 is displayed by macro list generator 16 to permit the user to define the name attribute as being customizable by future applications to be built on the template of the example.”).

Art Unit: 2191

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Sluiman into the teaching of Grindrod to include the customizable element being selected by an end-user. The modification would be obvious because one of ordinary skill in the art would be motivated to allow different customization options to be defined for the same template, allowing different potential users to make differing versions of the template (*see Sluiman – Column 10: 53-56*).

Response to Arguments

9. Applicant's arguments filed on December 15, 2008 have been fully considered, but they are not persuasive.

In the Remarks, Applicant argues:

a) By contrast, the cited portions of Grindrod at most teach that business rules may be customized or edited at design time. In other words, Grindrod teaches a method for customizing or editing business rules prior to use in a runtime environment. Nothing in Grindrod teaches or suggests editing of business rules in a runtime (i.e., post-execution) environment. At best, Grindrod teaches verification of a business rule in the runtime environment (Grindrod, column 19, lines 42-56). However, this verification process merely validates the business rule and reports errors; it does not make any alterations to the business rule. The actual creation and customization of the business rule is described within the context of a design time environment.

Examiner's response:

Art Unit: 2191

a) Examiner disagrees. With respect to the Applicant's assertion that nothing in Grindrod teaches or suggests editing of business rules in a runtime (*i.e.*, post-execution) environment, the Examiner respectfully submits that Grindrod clearly discloses "enabling editing of said rule-based application in a runtime environment" (*see Column 2: 5-9, "Thus, what is needed is a system and method that facilitate customizing an off-the-shelf business process automation software system to fulfill specific requirements of a specific business process for a specific organization while providing a user friendly interface."*; *Column 7: 7-16, "The business rules management console user interface 200 is typically the starting point for an administrator of the customizable business logic application administrator. The business rules management console 200 facilitates management of the business rules application and allows the administrator or end user to create and/or modify business rules in order to customize business processes."* and *39-44, "In particular, FIGS. 3-6 are exemplary user interfaces 220, 230, 250, and 270 for entering or modifying and displaying general information, conditions, actions, and schedule, respectively, regarding a new business rule or an existing business rule selected via, for example, the business rules manager."*; *Column 19: 41-56, "Although not expressly shown, the business rule process 700 also includes a runtime verification process. In particular, the runtime verification process checks that correct data types are being compared and assigned and checks for errors in conversion of data types, handling module and module parameter related errors, and elements of expressions that may not be available in various situations."*). First, note that Grindrod's invention is directed to systems and methods for customizing business logic rules within an off-the-shelf business process automation system and for processing business logic rules in the off-the-shelf business process automation system. As the Applicant is likely aware, an off-the-shelf

Art Unit: 2191

business process automation software is utilized in a runtime/execution/deployment environment. Second, further note that the various user interfaces (Figures 3-6) of the business rules management console allow an administrator or an end user to create and/or modify (edit) business rules in order to customize business processes. The business rules management console operates in a runtime/execution/deployment environment to facilitate management of the business rules application since the business rules management console is a separate software program executing in the administrator/end user's environment. Third, further note that Grindrod also discloses that the business rule creating/modifying process includes a runtime verification process. This clearly indicates that a runtime environment is involved in the customization of the business rules. In other words, the runtime verification of a customized business rule occurs after the administrator/end user customizes the business rule and thus, one of ordinary skill in the art would readily comprehend that the runtime verification process is executed by the business rules management console (runtime environment) to verify the customized business rule.

Therefore, for at least the reason set forth above, the rejections made under 35 U.S.C. § 103(a) with respect to Claims 1 and 32 are proper and therefore, maintained.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

Art Unit: 2191

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Qing Chen whose telephone number is 571-270-1071. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 4:00 PM. The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wei Zhen, can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/712,828

Page 15

Art Unit: 2191

/Q. C./

Examiner, Art Unit 2191

/Wei Y Zhen/

Supervisory Patent Examiner, Art Unit 2191